



Memristor Devices: Models, Developments and Applications

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Message from the Guest Editors

Dear Colleagues,

This Special Issue is dedicated to these memristor devices and especially to their modelling, development and applications. The list of possible topics includes, but is not limited to:

- Emerging memristors, including ReRAM, MRAM, PCRAM, FeRAM and associated selectors, from the demonstration of novel device concepts to fully integrated memory arrays
- Memristor architectures and process development from product prototyping to manufacturing-related challenges and solutions (integration schemes, novel circuit design schemes and novel memory architectures that enhance memory performance)
- Use and reliability of memristive devices for artificial intelligence and design architectures for in-memory and neuromorphic computing (neural networks)
- Memristor devices physics and theoretical approaches including analytical, numerical and statistical approaches applied to structures with dimensions ranging from atomistic over device dimensions to full-chip dimensions, including physics-based compact modeling
- Security and radiation effects on memristor devices (measurements, simulation, modelling, etc.)





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Message from the Editor-in-Chief

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